WO 2004/086380 PCT/IB2004/050219

PHNL030329

PCT/IB2004/050219

13

CLAIMS:

10

15

20

25

- 1. Record carrier of a writable type for recording information by writing marks in a track on a recording layer via a beam of radiation entering through an entrance face of the record carrier, the marks being detectable during scanning the track via the beam, the record carrier comprising
- at least a first recording layer (40) and a second recording layer (41), the first recording layer being present at a position closer to the entrance face (47) than the second recording layer, and
 - a transparent spacer layer (42) between the recording layers,
 - each recording layer comprising a pregroove (14) indicating the position of the track, the pregroove exhibiting a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing control information, and
 - the pregroove on the first recording layer (40) extending spirally in a first direction and the pregroove on the second recording layer (41) extending spirally in a second direction opposite to the first direction for constituting a multi-part recording area (54,57) interrupted by an intermediate zone that physically is constituted by a first intermediate part (55) located at the end of the first recording layer and a second intermediate part (56) located at the start of the second recording layer, the recording area being preceded by lead-in information (53) located at the start of the first recording layer and being followed by an ending part for lead-out information (58) or further intermediate information located at the end of the second recording layer,
 - a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and the ending part comprising said wobble modulation representing second control information
 - including recording parameters for the second recording layer.
 - 2. Record carrier as claimed in claim 1, wherein the lead-in part (68) of the pregroove is extending on the first recording layer from a starting radial position (66) to an

WO 2004/086380 PCT/IB2004/050219

PHNL030329

PCT/IB2004/050219

14

ending radial position (67), and the ending part (69) of the pregroove that comprises the second control information is substantially located between a radial position corresponding to said ending radial position (67) and a radial position corresponding to said starting radial position (66).

5

3. Record carrier as claimed in claim 2, wherein said ending radial position (67) on the first recording layer substantially corresponds to a radial position on the second recording layer where the wobble modulation representing the second control information starts.

10

20

25

30

- 4. Device for scanning a track on a record carrier (11) via a beam of radiation (24), the track comprising marks on a recordable area of a recording layer, the beam entering through an entrance face of the record carrier, the record carrier comprising
- at least a first recording layer (40) and a second recording layer (41), the first recording layer being present at a position closer to the entrance face than the second recording layer, and
 - a transparent spacer layer (42) between the recording layers, and
 - each recording layer comprising a pregroove indicating the position of the track, the pregroove exhibiting a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing control information, and
 - the pregroove on the first recording layer extending spirally in a first direction and the pregroove on the second recording layer extending spirally in a second direction opposite to the first direction for constituting a two part recording area interrupted by an intermediate zone that physically is constituted by a first intermediate part located at the end of the first recording layer and a second intermediate part located at the start of the second recording layer, the recording area being preceded by lead-in information located at the start of the first recording layer and being followed by an ending part for lead-out information or further intermediate information located at the end of the second recording layer,
 - a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and

PHNL030329 PCT/IB2004/050219

PCT/IB2004/050219

15

- the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer, the device comprising
- a head (22) for providing the beam,

WO 2004/086380

10

15

20

25

30

- recording means (27,28,29) for writing marks in the track via the beam,
 - a front-end unit (31) for generating a scanning signal (33) for detecting marks in the track, and
 - wobble detection means (32) for retrieving the first control information from the wobble modulation on the first recording layer and for locating the ending part and retrieving the second control information from the wobble modulation on the second recording layer.
 - 5. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and the second control information layer is recorded in the ending part.
 - 6. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information and the second control information are recorded in the lead-in part.
 - 7. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and the second control information is recorded in the lead-in part and also in the ending part.
 - 8. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and also in the ending part and the second control information is recorded in the lead-in part second control information is recorded in the lead-in part and also in the ending part.